

Professional & Managerial Branch
Professional Engineering Group
Public Works Series

CITY ENGINEER

07/02 (REB)

Summary:

Under general direction, as a department head, manage public works and transportation engineering functions, and allied technical and administrative support activities through subordinate supervisors.

Typical Duties

Plan, develop and organize public works, flood control, and traffic engineering construction and design programs. Involves: ensuring policies and methods meet statutory requirements and established engineering principles and standards; reviewing and interpreting current and proposed legislation and regulations in conjunction with City legal staff; and conducting and analyzing technological research to advise the Mayor and Council on engineering matters such as City facilities improvement and transportation infrastructure development, including nature and estimates of funds needed, feasibility and complexity of projects, and effects on City operations and the general public; recommending ordinances, resolutions, and major operational adjustments in order to preserve and enhance City engineering efficiency and effectiveness, including review staff proposals to solve problems such as integration of processes and services with other City departments, other jurisdictions, and regulatory agencies; participating in development of public works short and long range plans by determining departmental objectives, priorities and resources required for collaborative attainment of goals; conferring with governmental funding agencies on future or ongoing construction projects.

Implement, coordinate and evaluate timely, reliable and economical execution of City engineering department functions within available resources. Involves: studying and standardizing methods and performance measures to continuously improve service efficiency and quality; acquiring and allocating approved personnel, equipment and supplies, and arranging for maintenance; analyzing survey, design and construction time, labor and cost estimates and consultant and contractor bids on proposals to add, alter or remove municipal property, drains, streets, bridges, rights-of-way and easements; directing processes to approve and recommend changes to engineers' construction plans, and paving assessments; scheduling multiple projects, and reviewing progress, costs, "as built" plans, field investigations and related records and statistics for adherence to contract timeliness, technical provisions and appropriations, and to identify, diagnose and solve priority conflicts and organization problems; initiating corrective measures and controls to expedite and optimize interrelated activities and facilitate flow of communications; investigating and recommending action to rectify complaints about City buildings, structures, streets, sidewalks, bridges, signals and channelization conditions; construction and renovation quality and flooding, accidents and traffic flow patterns; reviewing private subdivision and development plans for impact on existing and future public works and transportation infrastructure, and adherence to engineering standards and code requirements; advising other City departments and elected officials; explaining to citizens, civic groups, consultants, contractors, utilities, planning commissions and regulatory agencies; the department's services and rules for solving operating problems and rectifying complaints; serving on designated boards to represent City engineering interests and acting as liaison to the United States Army Corps of Engineers.

Direct department administration. Involves: conducting cost-benefit, statistical or other analyses such as of project labor requirements and material specifications, and reviewing unit funding requests, proposed program improvements and suggested staffing to prepare consolidated annual budget, and set department performance measures; recording and analyzing personnel, equipment, supplies and maintenance costs, and justifying deviations from forecasts in accordance with established City and Public Works financial policies and procedures for controlling department's receipt, allocation and expenditure of budgeted, bond and grant funds; overseeing preparation of statements of work technical specifications and grant applications; participating in contract awarding and negotiation on engineering matters, administering design, construction and other service contracts according to City procurement policies and procedures; implementing Public Works Directives; preparing and presenting comprehensive ad hoc and recurring reports, charts and recommendations about department programs and projects with in-depth technical, statistical and cost estimates and results analyses for City officials and executives, and other jurisdictions and agencies; overseeing operation and updating of computerized engineering and mapping information, set up and maintenance of engineering library including maps, plans, plats and technical manuals and required department records keeping such as payroll, employee files, purchase requisitions and other transactions.

Supervise supervisory and nonsupervisory engineering, technical, administrative and clerical personnel. Involves: scheduling work to expedite flow and balance loads; assigning duties, and issuing written and oral instructions; checking work for service effectiveness, quality and quantity acceptability, and policy and procedural conformance; guiding subordinates to overcome difficulties encountered, correct errors and rectify complaints; appraising performance of direct reports and reviewing employee rating by subordinate supervisors, coach to motivate

competency improvement and career advancement; arranging for or conducting internal orientation, job training, employee development activities; enforcing personnel rules and regulation, and conduct, courtesy, attendance, appearance and safety standards; maintaining harmony among employees, and resolving third step grievances; interviewing and hiring applicants; commending, adjusting pay of, transferring, disciplining and terminating employees; changing staffing levels and job designs.

Perform miscellaneous related general managerial and professional engineering functions as required. Involves: participating in conferences to represent the City on engineering issues and to maintain awareness of technological advances.

Minimum Qualifications

Training and Experience: Graduation from an accredited college or university with a Bachelor's Degree in Civil, Electrical or Transportation Engineering or a related field and ten (10) years of increasingly complex professional civil, electrical or transportation engineering experience in design and construction of buildings, bridges, structures, roads, or flood or traffic control systems, including at least five (5) years managing and administering a major engineering program or phase of activity for an organization with diverse operations or multiple locations; or an equivalent combination of training and experience. (A Master's Degree in Engineering, Business or Public Administration or related field may substitute for up to two (2) years of non - supervisory experience.)

Knowledge, Abilities and Skills: Comprehensive knowledge of: administrative, budgetary and managerial policies and procedures applied to large governmental or private engineering organizations; engineering methods and theories applied to design and construction of public works, transportation infrastructure and allied control systems. Considerable knowledge of: legal and financial issues affecting public works programs; urban, regional land use and transportation planning; municipal services needs assessment; public relation practices.

Ability to: plan, develop, organize, implement, coordinate and assess functions of a large professional staff engaged in diverse programs and projects to ensure or improve effectiveness and efficiency of a multi-division engineering department; formulate and establish department policies, budgetary goals and service objectives; apply administrative and managerial principles and techniques, which includes ensuring maintenance and safety of essential City engineering and other departmental documents and electronic records; read and comprehend common technical, financial and legal documents; apply established mathematical and statistical techniques to analyze data in practical situations; define problems dealing with several abstract and concrete variables; collect and interpret an extensive variety of technical data and instruction, draw valid conclusions and initiate action to recommend, initiate and direct ongoing City public works and transportation infrastructure improvement and expansion projects to completion; impartially and firmly exercise appointing officer authority through subordinate supervisors to enforce personnel safety rules and regulations, and provide leadership to motivate productivity and cooperation of individuals or teams of various types to render quality and timely service; establish and maintain effective working relationships with fellow employees, City officials, consultants, contractors, utilities, other agencies, civic organizations and the general public using diplomacy complicated situations involving common engineering and management issues such as when responding to inquiries or complaints, negotiating business deals, or resolving internal conflicts; express oneself clearly and concisely orally and in writing to analyze and persuasively explain complex technical and regulatory standard practices in reports, correspondence, speeches and discussions.

Skill in the safe operation and care of personal computer or network work station, including computer aided drafting and design (CADD), geographic information system (GIS), word processing, database and spreadsheet programs; standard civil engineering and surveying instruments; operation of a motor vehicle through city traffic.

Licenses and Certificates: Valid Texas Professional Engineer License, or equivalent transferable from another state by time of application which must be converted within one (1) year following appointment; valid Texas Class "C" Driver's license or equivalent issued by another state by time of appointment.

Human Resources Director

Department Head